#### 2015-2016 Agricultural Economics Implementation Plan Report

Many of the 50 recommendations contained in the AEC 2011 Periodic Review involved one-time events, or are part of ongoing activities, so the eight most important goals were selected for reporting.

#### 1. Maintain a strong department seminar series to enhance all mission areas.

# Assessment method

We maintain a spreadsheet including dates, speaker name and host, speaker affiliation, and topic. Goals are to have an appropriate frequency of seminars, a productive blend of external and internal speakers, and adequate coverage of mission areas and sub-fields within the discipline.

#### <u>Results</u>

In the 2015-16 academic year, 25 seminars were held. Twelve featured internal speakers, and 13 were from outside UK. In the previous 2014-15 academic year, there were 26 seminars, 9 of which involved speakers from outside the department. In 2015-16 the coordinators were Didier Alia and Mike Reed. The coordinators' role is to solicit seminar invitations and to manage seminar logistics. All funded grad students are required to attend seminars, and other students and faculty are encouraged to attend. The coordinators are given a \$3,000 annual budget. In the current 2016-17 academic year, Samane Zarebanadkoki and Mike Reed are the seminar coordinators, and an active schedule is again planned, with plans to bring in some high-profile speakers from other universities.

#### Analysis of results and reflection

The series is meeting our needs, with appropriate frequency mix of external and internal speakers, and mix of topics. Success depends on how active the coordinators are in soliciting speaker ideas. One of the areas for improvement from last year, increasing grad student involvement during Q&A, has indeed improved substantially. Remaining areas for improvement are increasing faculty attendance and including more extension-oriented seminars.

#### **Ongoing improvement actions**

As I look at the faculty attendance, and consider the usual rate of unavoidable conflicts, I suspect the research faculty are attending at a realistic rate. The extension faculty feel they are fully booked doing fundamentally different tasks; I will continue trying to build more engagement at extension meetings and individual conversations. Coincidentally, an extension faculty member presented at last week's seminar.

# **2.** Recruit undergraduate students who want to be in the program, with emphasis on increasing freshman numbers, excelling in racial and ethnic diversity, and addressing a gender imbalance. Assessment method

Our primary source of information on undergraduate enrollment is the roster periodically distributed by the College. The most recent one was released in September, 2015. This week, Jamie Dunn provided me with a Tableau download of students graduating since Fall, 2011, which is also useful. Results

In Fall, 2016, AEC had 25 entering freshmen, which was 10% of the student body, a bit higher than the previous year. In September, 2015, 20% of the major's 256 undergrads were women, on the high end of

previous years. Of the 83 students who graduated in the 2015-16 academic year, 16% were women, 29% of the 80 2014-15 graduates were women, and 19% of the 2013-14 graduates were women. In 2015-16, 12% of AEC graduates were from minority groups, about the same as 2014-15 and slightly higher than 2013-14 and 2011-12, but substantially higher than the 6% value in 2012-13. Many of our minority students are members of UK's four-time national championship MANRRS chapter, and several participated in education abroad courses. Several landed excellent positions with major employers. First-generation students made up 13-18% of 2011-16 graduates, with no trending pattern over time. Analysis of results and reflection

Having the new data on graduates instead of just enrollees suggests that graduation rates are not systematically different by gender, which was an open question given the pattern of higher academic performance by women. A related question is whether gender differences exist in time-to-degree; answering this question would require additional data. A related pattern is that women tend to hold more student organization leadership roles. For example, five of our six quiz bowl team members in 2016 are women, and three of the five agribusiness case study competition team members are women, despite making up only 20% of the enrollment. A similar pattern holds among our Agribusiness Club leadership team.

The department houses the CAFE Diversity Office, which is one of the major sponsors of the annual Jr. MANRRS conference, and subsidizes student travel to regional and national MANRRS conferences. <u>Ongoing improvement actions</u>

Continued progress is most affected by recruiting effort; we must keep finding ways to generate awareness of the ag econ major. Bringing back our freshman-level intro class as a Social Science core course is being discussed. Our Academic Coordinator will be leaving for a career advancing move, and recruiting freshmen, women, and minorities will be a priority as we select her replacement. As in previous years, the most recent salary survey indicates that Ag Econ graduates earn higher average starting salaries than other ag majors except ag engineering and ag biotech.

# 3. Redesign the department's website to enhance its recruiting potential for graduate and undergraduate students.

# Assessment method

Current and prospective student feedback is the primary means of assessment. New for this year, I will include social media in this section, where assessment includes tracking numbers of Facebook page likes and LinkedIn connections.

#### **Results**

Both current and prospective students told us that our website was not a recruiting asset. A major update went live in July, 2015. It allows for easy updating by faculty and staff. Our Facebook page is maintained mostly by Karen Pulliam, and has a high number of page likes (1,129). We recently created a departmental LinkedIn page to track employment of graduates. It has 268 connections already. <u>Analysis of results and reflection</u>

I am not convinced that the website is a recruiting asset, but it is certainly not a discouraging factor, as it was previously. The social media presence has been extremely helpful in boosting our visibility, and the LinkedIn page lets us track graduates' employment effortlessly even after they change jobs. <u>Ongoing improvement actions</u>

Webpage updates will continue as needs evolve, and to meet the University's mandate that we only use the Athletics logo with no secondary logos. We will continue to seek feedback from users and visitors. Given that Facebook long ago ceased to be a popular destination for younger people, we may need to think about Instagram or other tools, but Karen Pulliam is already stretched thin, and maintaining our social media is an above-and-beyond contribution she is making to the department.

#### 4. Make conscious strategic decisions about involvement in distance learning.

#### Assessment method

Course schedules, enrollment numbers, student evaluations, and discussions in undergraduate committee and faculty meetings are the main items used for assessment.

# <u>Results</u>

Roger Brown has long taught a hybrid core course in Ag Marketing (AEC 305). Online lab exercises are used in some sections of Ag Management (AEC 302), and a fully online version was offered once in Summer, 2013. A fully online version of Microeconomics (AEC 303) was offered in Summer, 2013. In recent years, our enrollment stabilized.

#### Analysis of results and reflection

The distance learning courses allowed more students to be served. The additional capacity helped keep seniors from taking core courses late in their programs. The hybrid AEC 305 course seems well-received. The online AEC 302 labs let students replay instructions, and seems superior to the live experience in some ways. The AEC 303 distance learning version was not received well.

#### **Ongoing improvement actions**

We will continue to monitor student demand and budgetary incentives for distance education, especially as this appears as a recommendation in the 2016 periodic departmental review. Our masters-level farm management class has potential to serve extension agents who are remotely pursuing a graduate degree for their career ladder. We are not otherwise pursuing further online course development at this time. Faculty must be personally interested and convinced it will not reduce quality of learning. Roger Brown continually offers to help faculty learn the tools he tests and uses.

# 5. Enable students to have experiential education and education abroad opportunities.

# Assessment method

Track enrollment in ISP 599 for education abroad activities, assess career preparation potential of internships during approval of AEC 399 learning contract, discuss progress with employers. <u>Results</u>

All AEC undergraduates entering Fall, 2014 or later fulfill an experiential education requirement. During the last year, the primary education abroad courses taken by AEC students involved travel to Argentina, the Dominican Republic, Mexico, and France and Switzerland. For the first time, education abroad participation rates in AEC rose above 10%, with 27 AEC students enrolling in the Argentina and France/Switzerland courses alone, not counting participation in non-AEC education abroad courses. We provided \$500 subsidies per student. The annual symposium in which students present their experiential education is high-impact, with several employers attending. Our Academic Coordinator works closely with several employers. One employer is working with us to create a 6-month co-op offering more benefits for both parties than the traditional summer internship. UK's ag econ team

placed second in the 2016 Food Distribution Research Society case study competition, and for the first time in 19 years we won our discipline's national quiz bowl competition.

# Analysis of results and reflection

Subsidizing education abroad students, and using department funds for the instructors' expenses, allowed several students to participate. Given its impact on student development, and the high regard of employers, we intend to continue these subsidies. The consulting projects, academic competitions, and emphasis on professional soft skills are producing encouraging results. The just-concluded experiential education Symposium was a great success, with about 180 attendees that exceeded our expectations.

# Ongoing improvement actions

Experiential education, education abroad, and supporting competition teams and consulting opportunities will continue to be a funding priority. We are increasingly talking about extending our experiential education strategies to the graduate program, which is consistent with the Provost's recent strategic initiative to encourage nimble graduate programs that align with employer needs. The draft report of our periodic departmental review committee includes a recommendation to separate the Academic Coordinator role and create a new experiential education coordinator position.

# 6. Enhance graduate student opportunities to work in extension via applied research, and increase the extension faculty role in the graduate program.

# Assessment method

Maintain contact with employers who offer extension-related opportunities. Discuss outreach-related opportunities during prospective student visits, reiterate opportunities to graduate students, encourage participation with funding for the AAEA graduate student extension competition, and provide financial support for the departmental Summer Ag Tour for graduate students. Results

Several MS students have extension-related interests, and we actively promote extension career paths when recruiting prospective graduate students. The extension faculty are willing to advise graduate students and be members of thesis committees. We recently launched a departmental LinkedIn page to track students' employment after graduation. A graduate student representative was added to the department's extension committee this year.

# Analysis of results and reflection

Encouraging students to target an area of applied economics with abundant career potential is a way to differentiate our graduate program, and is consistent with our Land Grant mission. We continue to struggle with ways to translate the willingness of the students and extension faculty to interact with each other into actual shadowing visits and programming involvement. A few students are working directly on extension-related projects, and are building useful skills.

# Ongoing improvement actions

For the second year, a faculty member is teaching an MS-level ag management course that can be made accessible to both extension agents and students. We will continue promoting the Summer Ag Tour, and using KFBM to introduce grad students to extension-related data analysis. Collaborations between research and extension faculty are now more frequent, and this serves grad students well.

# 7. Increase grant funding.

# Assessment method

Track grant expenditures, graduate students funded on grants, and the mix of grants among extension and research faculty, and among junior and senior faculty.

# <u>Results</u>

After the first 3 months of FY17, AEC has \$1,691,719 in new primary awards. Of this, CEDIK is the PI on \$1.54 million, and the remainder was awarded to two extension faculty. The comparable FY16 year-end value was only \$351,039, much lower than \$681,135 in FY15. Of the FY16 amount, 56% was obtained by Alison Davis (CEDIK) as PI, 28% was obtained by 2 additional extension faculty PIs, and only 16% was obtained by 2 research faculty PIs. Wethington Awards totalled \$67,255 in FY16, down sharply from FY15 but comparable to FY14, FY13, and FY12, with extension faculty receiving 64% of the FY16 awards. <u>Analysis of results and reflection</u>

Three quarters of the faculty were not PI's on a new grant in FY16, which can only be interpreted negatively. External funding for grad students comes from grants or salary savings freed up by grants. The OSPA data that are attributed by PI names do not reflect that the newer research faculty are producing encouraging levels of grantsmanship. The culture that "grants are inputs, not outputs" is gradually giving way to a more productive culture that faculty are responsible for attracting graduate program support. The department has internal funding for approximately 9 research assistants. The stipend is low relative to many peer institutions, and grants offer a way to offer higher stipends. Ongoing improvement actions

Several junior faculty submitted a USDA National Needs Fellowship proposal. If successful, this will provide multiple assistantship stipends at nationally competitive levels for domestic graduate students. Highlighting the graduate program's reliance on faculty grantsmanship, and efforts to recognize that MS and PhD graduates are important research "outputs," will continue to be pursued.

# 8. Track and reward research impact

# Assessment method

AEC research faculty were asked to document research impacts using whatever criteria they deemed reasonable. The primary resources are RePEc, ResearchGate, Google Scholar, and AgEcon Search. <u>Results</u>

There was progress in faculty registering with RePEc, Google Scholar, and/or ResearchGate; eight of 11 research faculty have registered with at least one. Journal articles with high impact factors are becoming more common, with two *AJAE* publications in the last three years, and three others of similar repute. Recent collaborations between research and extension faculty will produce research used by non-academic decision makers.

# Analysis of results and reflection

Letting faculty define impacts using their own criteria in the APR process will raise awareness and achieve the goal without overly constraining varying definitions of what constitutes "applied" research. <u>Ongoing improvement actions</u>

With this being an "on year" for APR's, it reinforces the need for research impact reporting. Having full participation increases the likelihood of an improved ranking for our Ph.D. program.